

THE HEALTH CARE WORKFORCE IN EIGHT STATES: EDUCATION, PRACTICE AND POLICY

Spring 2004

MONTANA

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The Health Care Workforce in Eight States: Education, Practice and Policy

PROJECT DESCRIPTION

Historically, both federal and state governments have had a role in developing policy to shape the health care workforce. The need for government involvement in this area persists as the private market typically fails to distribute the health workforce to medically underserved and uninsured areas, provide adequate information and analysis on the nature of the workforce, improve the racial and ethnic cultural diversity and cultural competence of the workforce, promote adequate dental health of children, and assess the quality of education and practice.

It is widely agreed that the greatest opportunities for influencing the various environments affecting the health workforce lie within state governments. States are the key actors in shaping these environments, as they are responsible for:

- financing and governing health professions education;
- licensing and regulating health professions practice and private health insurance;
- purchasing services and paying providers under the Medicaid program; and
- designing a variety of subsidy and regulatory programs providing incentives for health professionals to choose certain specialties and practice locations.

Key decision-makers in workforce policy within states and the federal government are eager to learn from each other. This initiative to compile in-depth assessments of the health workforce in 8 states is an important means of insuring that states and the federal government are able to effectively share information on various state workforce data, issues, influences and policies.

Products of this study include individual health workforce assessments for each of the eight states and a single assessment that compares various data and influences across the eight states. In general, each state assessment provides the following:

- 1) A summary of health workforce data, available resources and a description of the extent the state invests in collecting workforce data. [Part of this information has been provided by the Bureau of Health Professions];
- 2) A description of various issues and influences affecting the health workforce, including the state's legislative and regulatory history and its current programs, financing and policies affecting health professions education, service placement and reimbursement, planning and monitoring, and licensure/regulation;
- 3) An assessment of the state's internal capacity and existing strategies for addressing the above workforce issues and influences; and
- 4) An analysis of the policy implications of the state's current workforce data, issues, capacity and strategies.

The development of the project's data assimilation strategy, content and structure was guided by an expert advisory panel. Members of the advisory panel included both experts in state workforce policy (i.e., workforce planners, researchers and educators) and, more broadly, influential state health policymakers (i.e., state legislative staff, health department officials). The advisory panel has helped to ensure the workforce assessments have an appropriate content and effective format for dissemination and use by both state policymakers and workforce experts/officials.

STUDY METHODOLOGY

Study Purpose and Audience

Key decision-makers in workforce policy within states and the federal government are eager to learn from each other. Because states increasingly are being looked to by the federal government and others as proving grounds for successful health care reform initiatives, new and dynamic mechanisms for sharing innovative and effective state workforce strategies between states and with the federal government must be implemented in a more frequent and far reaching manner. This initiative to compile comprehensive capacity assessments of the health workforce in 8 states is an important means of insuring that states and the federal government are able to effectively share information on various state workforce data, issues and influences.

Each state workforce assessment report is not intended to be voluminous; rather, information is presented in a concise, easy-to-read format that is clearly applicable and easily digestible by busy state policymakers as well as by workforce planners, researchers, educators and regulators.

Selection of States

NCSL, with input from HRSA staff, developed a methodology for identifying and selecting 8 states to assess their health workforce capacity. The methodology included, but was not limited to, using the following criteria:

- a. States with limited as well as substantial involvement in one or more of the following areas: statewide health workforce planning, monitoring, policymaking and research;
- b. States with presence of unique or especially challenging health workforce concerns or issues requiring policy attention;
- c. States with little involvement in assessing health workforce capacity despite the presence of unique or especially challenging health workforce concerns or issues requiring policy attention;
- d. Distribution of states across Department of Health and Human Services regions;
- e. States with Bureau of Health Professions (BHPr) supported centers for health workforce research and distribution studies;
- f. States with primarily urban and primarily rural health workforce requirements; and
- g. States in attendance at BHPr workforce planning workshops or states that generally have interest in workforce modeling.

Collection of Data

NCSL used various means of collecting information for this study. Methods exercised included:

- a. Phone and mail interviews with state higher education, professions regulation, and recruitment/retention program officials;
- b. Custom data tabulations by national professional trade associations and others (i.e., Quality Resource Systems, Inc.; Johns Hopkins University School of Public Health) with access to national data bases;
- c. Tabulations of data from the most recent edition of federal and state government databases (e.g., National Health Service Corps field strength);
- d. Comments and guidance from members of the study's expert advisory panel.
- e. Site visit interviews with various officials in the eight profile states;
- f. Personal phone conversations with other various state and federal government officials; and
- g. Most recently available secondary data sources from printed and online reports, journal articles, etc.

STATE SUMMARY

Montana is very rural, largely frontier, state with a small minority population. The state's proportion of residents without health insurance is above the national average. This is partly attributable to Montana's predominant number of small business who say they cannot afford to offer such coverage to their employees. Of equal concern is the persistent lack of geographical access to health care professionals. The proportion of the state's population residing in primary care health professional shortage areas (HPSAs) exceed the national average; the percentage living in dental HPSAs is more than double the national proportion. Montana's overall per capita supply of physicians and nurses is also below national ratios. The state's number of pharmacists and dentists per capita mirrors or exceeds nationwide figures.

Efforts by the state to address health workforce shortages have been piecemeal. Montana enjoys having a ratio of National Health Service Corps (NHSC) professionals per HPSA population that is nearly four times the national ratio. State officials openly state that Montana relies heavily on the NHSC program to address its physician shortages. The Montana Rural Physician Incentive Program, a loan repayment initiative created in 1991 to encourage primary care physicians to practice in rural medically underserved areas of the state, and the Montana Family Practice Residency, established in the late 1990s to accomplish a similar objective, are two state programs also viewed as important in addressing workforce needs. Also seen by state officials as somewhat effective is Montana's tax credit for health professionals practicing in rural areas of the state.

Growing concern with mounting shortages of health care workers prompted Montana's governor in 2001 to appoint a Blue Ribbon Task Force on Health Care Workforce Shortages to assess the extent of the problem and develop recommendations and strategies to effectively address the issue. A 2002 report offered various recommendations to improve educational opportunities, the health care work environment, worker reimbursement and compensation, and workforce data collection and analysis. Since the issuance of the report, there appears to be no comprehensive support to address the report's findings and recommendations. The Montana Area Health Education Center (AHEC), Department of Public Health and Human Services' Primary Care Office, Montana Department of Commerce, and others routinely track certain supply trends associated with the state's health care workforce.

A large proportion of active physicians work under *locum tenens* arrangements and do not have a regular practice in one or more locations. The state relies to a significant extent on physician assistants and nurse practitioners to deliver primary care in many locations unable to attract a physician.

A growing consensus that Montana faces a nursing shortage is, like elsewhere, associated with an insufficient capacity of nurse training programs to educate more nurses. There is greater concern with reports that at least 60 percent of newly trained nurses in Montana leave the state upon graduation due to perceptions that Montana lacks attractive or fulfilling work environments for nurses burdened by loans and other issues.

Montana has no dental school and just one dental hygiene training program which recently opened. According to a 2003 survey of the state's dentists, the dentist population in Montana, like elsewhere, is rapidly aging, and there are growing concerns that their supply are not being adequately replenished. The new dental hygiene program, which in essence replaced the state's one school that closed in 1989, is challenged to address the current demand by dentists for hygienists. Many hygienists are recruited to dentist practices from outside Montana.

I. WORKFORCE SUPPLY AND DEMAND

Arguably, it is most important initially to understand the marketplace for a state's health care workforce. How many health professionals are in practice statewide and in medically underserved communities? What are the demographics of the population served? How is health care organized and paid for in the state? This section attempts to answer some of these questions by presenting state-level data collected from various sources.

Table I-a.

PO	PULATION	MT	U.S.
Total	Population (2001)	904,433	284,796,887
Sex % Female 50.2		50.9	
(2000)	% Male	49.8	49.1
	% less than 18	25.5	25.7
Age (2000)	% 18-64	61.1	61.9
(111)	% 65 or over	13.4	12.4
% Minority/Ethnic (2002)		8.9	30.9
% Me	etropolitan (2002)	23.2	81.3

^{*} As defined by the U.S. Office of Management and Budget

Sources: U.S. Census Bureau, AARP.

Only twenty-three percent of Montana residents live in metropolitan areas.

Table I-b.

PROFESSION UTILIZATION	MT	U.S.
% Adults who Reported Having Routine Physical Exam Within Past Two Years (1997)	78.0	83.2 (Median)
Average # of Retail Prescription Drugs per Resident (2002)		10.6
% Adults who Made Dental Visit in Preceding Year by Annual Family Income	(1999):	
Less than \$15,000	53	1
\$15,000 - \$34,999	63	1
\$ 35,000 or more	75	

Sources: CDC, AARP, GAO.

Seventy-eight percent of Montana adults reported having a routine physical exam within the past two years.

Table I-c.

ACCESS TO CARE		MT	U.S.
% Non-elderly (under age 65) Without Health Insurance	(under age 65) Without Health Incurance		17
76 Non-ciderry (under age 63) without Health insurance	1999-2000	21	16
% Children Without Health Insurance	2000-2001		12
70 Children Without Health histilance	1999-2000	18	12
% Not Obtaining Health Care Due to Cost (2000)			9.9
% Living in Primary Care HPSA (2003)		27.8	21.3
# Practitioners Needed to Remove Primary Care HPSA Designation (2003)		34	
% Living in Dental HPSA (2003)			14.7
# Practitioners Needed to Remove Dental HPSA Designation	(2003)	43	

HPSA = Health Professional Shortage Area

Sources: KFF, AARP, BPHC-DSD.

Over thirty-six percent of Montana residents live in dental HPSAs and more than onequarter of Montana residents live in primary care HPSAs.

Table I-d.

Table 1-u.				
	PROF	FESSIONS SU	PPLY	
Profession		# Active Practitioners	# Active Practitioners per 100,000 Population	
			MT	U.S.
Pł	nysicians (1998)	1,594	181.2	198
Physic	ian Assistants (1999)	131	14.8	10.4
	RNs (2000)	9,299	812	782
	LPNs (1998)	2,360	268.3	249.3
Nurses	CNMs (2000)	24	2.5	2.1
	NPs (1998)	252	28.7	26.3
	CRNAs (1997)	61	6.9	8.6
Ph	armacists (1998)	640	72.8	65.9
I	Dentists (1998)	422	48.0	48.4
Denta	l Hygienists (1998)	490	55.7	52.1
%	Physicians Practicing Prin	mary Care	32.0 (3	0.0 U.S.)
% Registered Nurses Employed in Nursing		78.8 (81.7 U.S.)		
Inte	% of MDs Who Ar ernational Medical Gradua		4.0 (24	4.0 U.S.)

RN= Registered Nurse, LPN= Licensed Practical Nurse, CNM= Certified Nurse Midwife, NP= Nurse Practitioner CRNA= Certified Registered Nurse Anesthetist

Source: HRSA-BHPr.

Only four percent of physicians in Montana are international medical graduates.

Table I-e.

1 abic 1 c.	ubic i Ci					
NATIONAL HEALTH SERVICE CORPS (NHSC) FIELD STRENGTH						
Total Field Stren * Includes mental/beha		% in Urban Areas	% in Rural Areas	# Per 10,000 Population Living in HPSAs		
49		16	84	1.95 (0.49 U.S.)		
Field Strength	by Profession					
Physicians	18					
Nurses 4						
Physician Assistants 7						
Dentists/Hygienists	4					

HPSA= Health Professional Shortage Area

Source: BPHC-NHSC.

Montana has nearly four times as many National Health Service Corps professionals per 10,000 population as the U.S. as a whole.

Table I-f.

I	MANAGED CAI	RE	
Penetration Rate of Commercial and I	Medicaid HMOs	MT	U.S.
(as % of total population),	2000	8.1	28.1
Profession	MCOs required by state to include profession on their provider panel*	Profession allowed by state to serve as primary care provider in MCOs	Profession allowed by state to coordinate primary care as part of a standing referral
Physicians	No	Yes	No
Nurses	No	No	No
Pharmacies	No	No	No
Dentists	No	No	No
State requires certain individuals enrolle specialty (OB/G	Yes		
State requires certain individuals enrolled specialist (C	I in MCOs to receive a DB/GYN, etc.).	standing referral to a	No

MCOs = Managed Care Organizations HMOs = Health Maintenance Organizations OB/GYN = Obstetrician/Gynecologist * This requirement does not preclude MCOs from including additional professions on their provider panels.

Sources: HPTS, AARP.

Only eight percent of Montana residents receive their health care from an HMO.

Table I-g.

Table	<u>- 8'</u>	DEIMRIII	RSEMENT OF SI	FDVICES	
	Profession	% Active Practitioners Enrolled	% Enrolled Receiving Annual Payments Greater Than \$10,000 ¹	Increase of 10% or More in Overall Payment Rates 1998-2003	Bonus or Special Payment Rate for Practice in Rural or Medically Underserved Area
	Physicians	*	18.0	No	No
caid	NPs	27	9.2	No	No
Medicaid	Dentists 78 32.5 Yes				No
		460			
		N/A			
		Yes (for dentists)			
Medicare		1,433			
	(90.9			

Generally seen as an indicator of significant participation in the Medicaid program.

N/A- Data was not available

Sources: State Medicaid programs, Norton and Zuckerman "Trends", HPTS, AARP.

Only eighteen percent of physicians in Montana receive Medicaid payments of greater than \$10,000 annually. Over thirty percent of dentists receive Medicaid payments of more than \$10,000 annually.

² Denominator number from HRSA State Health Workforce Profile, December 2000.

^{*} Numerator data for physicians and nurse practitioners from state Medicaid agencies were unusable: many professionals were apparently double-counted, perhaps due to varying participation in different health plans.

II. HEALTH PROFESSIONS EDUCATION

State efforts to help ensure an adequate supply of health professionals can be understood in part by examining data on the state's health professions education programs—counts of recent students and graduates, amounts of state resources invested in education, and other factors. State officials can gauge how well these providers reflect the state's population by also examining how many students and graduates are state residents or minorities. Knowing to what extent states are also investing in primary care education and how many medical school graduates remain in-state to complete residencies in family medicine is also important.

Table II-a.

UNDERGRADUAT	E MEDICAL EDUC	CATION	
# CM F 101 1		Public Schools	0
# of Medical Schools (Allopathic and Osteopathic)	0	Private Schools	0
(Anopume una Osicopume)		Osteopathic Schools	0
# of Medical Students	1998-1999	0	
(Allopathic and Osteopathic)	2000-2001	0	
# Medical Students per 100,000 Population ¹	1998-1999	0	
# Medical Students per 100,000 Fopulation	2000-2001	0	
% Newly Entering Students (Ala who are State Residents, 2002	•	N/A*	
Requirement for Students in Some/All Medical	By the State	N/A*	
Schools to Complete a Primary Care Clerkship	By Majority of Schools	Public Schools Private Schools Osteopathic Schools 0 0 0 N/A*	
# of Medical School Graduates	1998	0	
(Allopathic and Osteopathic)	2001	0	
# Medical School Graduates per 100,000	1998	0	
Population ¹	2001	0	
% Graduates (Allopathic) wh Underrepresented Minorities, 19		N/A*	
% 1987-1993 Medical School C (Allopathic) Entering Generalist S		N/A*	
State Appropriations to Medical Schools	Total	0	
(Allopathic and Osteopathic), 2000-2001	Per Student	0	

¹ Denominator number is state population from 2000 U.S. Census.

Sources: AAMC, AAMC Institutional Goals Ranking Report, AACOM, Barzansky et al. "Educational Programs", State higher education coordinating boards.

Montana does not have an allopathic or osteopathic medical school.

Table II-b.

GF	RADUATE MEDICAL	EDUCATION (GME)	
# of Residency P	rograms (Allopathic and Osteopa	thic), 2002-2003 ¹	2
# of Physician R	esidents (Allopathic and Osteopa	thic), 2002-2003 ¹	N/A
# Resi	dents Per 100,000 Population, 200	02-2003	N/A
% Allopathic Re	esidents from In-State Medical Sc	hool, 2000-2001	0.0
% Residents who	o are International ² Medical Grad	uates, 2000-2001	5.0
Requirement to Off	Fer Some or All Residents a	By the State	No
	cal Rotation	By Most Primary Care Residencies	Yes
Medicaid Pa	yments for Graduate Medical Edu	ecation, 2002 ³	\$0.12
	Payments as % of Total Medi	caid Hospital Expenditures	1.0 (8.0 U.S.)
		Made Directly to Teaching er Capitated Managed Care	No
	No		
Medicare Pa	yments for Graduate Medical Edu	ication, 1998 ³	\$1.9 million

^T Includes estimated number of osteopathic residencies/residents <u>not</u> accredited by the Accreditation Council for Graduate Medical Education.

² Does not include residents from Canada.

³ Explicit payments for both direct and indirect GME cost.

N/A = Data was not available

Sources: AMA, AMA State-level Data, AACOM, State higher education coordinating boards, Henderson "Funding", Oliver et al. "State Variations."

Five percent of residents in Montana are international medical graduates.

Table II-c.

FAMILY MEDICINE RESIDENCY TRAINING					
# of Residency Programs, 2001-2002	2	# Residencies Located in Inner City	1		
	2	# Residencies Offering Rural Fellowships or Training Tracks	0		
# of Family Medicir	N/A				
# Family Medicine Residents per 100,000 Population, 2001-2002 ¹			N/A		
% Graduates (from state's Allopathic and Osteopathic medical schools) who were First Year Residents in Family Medicine, 1995-2001			N/A*		
% Graduates (from state's Allopathic me Residency Program Who Entered an In-S			N/A*		

Denominator number is state population from 2000 U.S. Census.

N/A = Data was not available

N/A*= Data was not applicable

Sources: AAFP, AAFP <u>State Legislation</u>, Kahn et al., Pugno et al. and Schmittling et al. "Entry of U.S. Medical School Graduates".

Montana has two residency programs for family medicine.

Table II-d.

	NURSING	G EDUCATION		
# of Nursing Schools	5	Public Schools	S	3
# 01 Nursing Schools	3	Private School	S	2
		# Associate Degree, 20	001-2002	101
# of Nursing Students ¹		# Baccalaureate Degree	2001-2002	636
		# Baccalaureate Degree	2002-2003	767
	889	# Masters Degree	2001-2002	19
			2002-2003	21
		# Doctoral Degree	2001-2002	0
			2002-2003	0
		98.3		
		# Associate Degree		39
		# De coeleumete De mo	2001	130
		# Baccalaureate Degree	2002	133
	180		2001	10
# of Nursing School Graduates ¹		# Masters Degree	2002	8
		// Destard Design	2001	0
		# Doctoral Degree	2002	0
		# Per 100,000 population ²	1	19.9

Annual figure for Associate, Baccalaureate, Masters and Doctoral students/graduates for most recent years available.

Sources: NLN, AACN, State higher education coordinating boards.

Enrollments and graduations in baccalaureate and master's level nursing programs increased slightly from 2001 to 2002.

² Denominator number is the state population from the 2000 U.S. Census.

Table II-e.

PHARMACY EDUCATION			
# of Pharmacy Schools	1	Public Schools	1
" of Final macy schools	1	Private Schools	0
	222		12
# of Pharmacy Students, 2002-2003	LLL	# Doctoral Degree (PharmD)	210
		Per 100,000 population*	24.5
	65	# Baccalaureate Degree	21
# of Pharmacy Graduates, 2001-2002		# Doctoral Degree (PharmD)	44
		# Per 100,000 population*	7.2

^{*} Denominator number is state population from 2000 U.S. Census.

Source: AACP.

Table II-f.

PHYSICIAN ASSISTANT EDUCATION			
# of Physician Assistant Training Programs,	1	Public Schools	0
2002-2003	1	Private Schools	1
# of Physician Assistant Program Students, 1997-1998 ^{1,2}			32
# Physician Assistant Program Students per 100,000 Population, 1997-1998		3.53	
# of Physician Assistant Program Graduates, 2003		N/A	
# Physician Assistant Program Graduates per 100,000 Population, 2003		N/A	

Denominator number is state population from 2000 U.S. Census.

N/A= Data was not available

Sources: APAP, APAP Annual Report.

 $^{^2\}mbox{There}$ was no data available for the most recent years from Montana.

Table II-g.

DENTAL EDUCATION			
# of Dental Schools		Public Schools	0
# 01 Delital Schools	0	Private Schools	0
# of Dental Students, 2000-2001 0			
# Dental Students per 100,000 Population, 2000-2001*	0		
# of Dental Graduates, 1999-2000	0		
# Dental Graduates per 100,000 Population, 2000*	0		
State Appropriations to Dental Schools, 1997		Per Student: N/A*	
		As % of Total Revenue: N/A*	

^{*} Denominator number is state population from 2000 U.S. Census.

Source: ADA.

Table II-h.

DENTAL HYGIENE EDUCATION			
# of Dental Hygiene Training Programs The one school was newly opened in 2003.		Public Schools	1
		Private Schools	0
# of Dental Hygiene Program Students, 2001-2002		0	
# Dental Hygiene Program Students per 100,000 Population*			
# of Dental Hygiene Program Graduates, 2000-2001		0	
# Dental Hygiene Program Graduates per 100,000 Population*			

^{*} Denominator number is state population from 2000 U.S. Census.

Sources: ADHA, AMA Health Professions.

III. PHYSICIAN PRACTICE LOCATION

The following tables examine in-state physician practice location from two different vantage points: (1) of all physicians who were trained (went to medical school or received their most recent GME training) in the state between 1975 and 1995, and (2) of all physicians who are now practicing in the state, regardless of where they were trained. Complied from the American Medical Association's 1999 Physician Masterfile by Quality Resource Systems, Inc., the data importantly illustrates to what extent physician graduates practice in many of the state's small towns, using the rural-urban continuum developed by the U.S. Department of Agriculture.

PRACTICE LOCATION (URBAN/ RURAL) OF PHYSICIANS WHO RECEIVED THEIR MEDICAL SCHOOL TRAINING IN MONTANA BETWEEN 1975 AND 1995.

Table III-a.

MONTANA		
Number of physicians who were trained in MT and who are now practicing in Mpercentage of all physicians practicing in MT.	IT as a	0.00
	#00	0.00
	#01	0.00
	#02	0.00
NI 1 C 1 ' ' 1 ' MT 1 ' ' ' MT 1	#03	0.00
Number of physicians who were trained in MT and are practicing in MT, by practice location (metro code ¹), as a percentage of all physicians practicing in	#04	0.00
MT.	#05	0.00
	#06	0.00
	#07	0.00
	#08	0.00
	#09	0.00
Number of physicians who were trained in MT and who are now practicing in MT as a percentage of all physicians who were trained in MT.		
	#00	0.00
		0.00
		0.00
	#03	0.00
Number of physicians who were trained in MT and are practicing in MT, by	#04	0.00
practice location (metro code ¹), as a percentage of all physicians trained in MT.	#05	0.00
	#06	0.00
	#07	0.00
#08		0.00
	#09	0.00

1995 Rural/Urban Continuum Codes for Metro and Nonmetro Counties. Margaret A. Butler and Calvin L. Beale. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

Codes # 00-03 indicate metropolitan counties:

- 01: Fringe counties of metro areas of 1 million or more
- 02: Counties with metro areas of 250,000 1 million
- 03: Counties in metro areas of less than 250,000
- NA: Not Applicable; no counties in the state are in the R/U Continuum Code

Codes # 04-09 indicate non-metropolitan counties:

- 04: Urban population of 20,000 or more, adjacent to metro area
- 00: Central counties of metro areas of 1 million or more 05: Urban population of 20,000 or more, not adjacent to metro area
 - 06: Urban population of 2,500-19,999, adjacent to metro area
 - 07: Urban population of 2,500-19,999, not adjacent to metro area
 - 08: Completely rural (no place w population > 2,500), adjacent to metro

09: Completely rural (no place w population > 2,500), not adjacent to metro area

PRACTICE LOCATION (URBAN/ RURAL) OF PHYSICIANS WHO RECEIVED THEIR MOST RECENT GME TRAINING IN MONTANA BETWEEN 1978 AND 1998.

Table III-b.

MONTANA		
Number of physicians who received their most recent GME training in MT and who practicing in MT as a percentage of all physicians practicing in MT.	are now	0.00
	#00	0.00
	#01	0.00
	#02	0.00
	#03	0.00
Number of physicians who received their most recent GME training in MT and are practicing in MT, by practice location (metro code ¹), as a percentage of all	#04	0.00
physicians practicing in MT.	#05	0.00
physicians practicing in 1911.	#06	0.00
	#07	0.00
	#08	0.00
	#09	0.00
Number of physicians who received their most recent GME training in MT and who practicing in MT as a percentage of all physicians who were trained in MT.	are now	0.00
	#00	0.00
	#01	0.00
	#02	0.00
	#03	0.00
Number of physicians who received their most recent GME training in MT and	#04	0.00
are practicing in MT, by practice location (metro code ¹), as a percentage of all physicians trained in MT.	#05	0.00
physicians trained in M.1.	#06	0.00
	#07	0.00
	#08	0.00
	#09	0.00

¹ 1995 Rural/Urban Continuum Codes for Metro and Nonmetro Counties. Margaret A. Butler and Calvin L. Beale. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

Codes # 00-03 indicate metropolitan counties:

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- 08: Completely rural (no place w population > 2,500), adjacent to metro area
- 09: Completely rural (no place w population > 2,500), not adjacent to metro area
- NA: Not Applicable; no counties in the state are in the R/U Continuum Code.

IV. LICENSURE AND REGULATION OF PRACTICE

States are responsible for regulating the practice of health professions by licensing each provider, determining the scope of practice of each provider type and developing practice guidelines for each profession. The tables below illustrate the licensure requirements for each of the health professions covered in this study as well as additional information on recent expansions in scope of practice or other novel regulatory measures taken by the state.

Table IV-a.

PHYSICIANS		
LICENSURE REQUIREMENTS	Degree in allopathic or osteopathic medicine. Completion of post graduate training. Score of 75 or more on National Board of Medical Examiners examination, Federation Licensing Examination (FLEX) or the USMLE.	
LICENSURE REQUIREMENTS: INTERSTATE TELE-CONSULTATION	Must hold a telemedicine certificate from the state. The certificate allows an out-of-state physician to practice telemedicine, but does not allow the physician to practice while in the state.	
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	No.	

Sources: State licensing board, HPTS.

Table IV-b.

PHYSICIAN ASSISTANTS		
LICENSURE REQUIREMENTS	Proof of graduation from an accredited physician assistant program. Proof of attaining a passing score on an examination given by the national commission of physician assistants.	
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	PRESCRIPTIVE AUTHORITY Physician Assistants can prescribe schedule II-V medications and up to a 34 day supply of schedule II medications as delegated by a physician. PHYSICIAN SUPERVISION Communication between PA and physician by telephone, radio, or in person as frequently as the board decides is necessary. If practicing in a remote site, PA and supervising physician must work together in direct contact for a minimum of two weeks before PA delivers services in remote site. Supervising physician must visit remote site every 30 days or other interval.	

Source: State licensing board.

Table IV-c.

Table IV-c.		
NURSES		
LICENSURE REQUIREMENTS	Registered Nurses (RNs): Must have successfully completed at least an approved 4-year high school course of study or the equivalent as determined by the office of the superintendent of public instruction; have completed the basic professional curriculum in an approved school of nursing verified by official transcript; and passed the National Council of State Boards of Nursing (NCLEX) RN exam, or a Board approved licensing exam.	
	Advanced Practice Nurses (APNs): Must be licensed as an RN in Montana and have successfully completed a post basic professional nursing education program in the APRN area of specialty and received individual certification from a board approved certifying body or have a masters degree from an accredited nursing education program and have obtained national certification.	
	Licensed Practical Nurses (LPNs): Must have successfully completed at least an approved 4-year high school course of study or the equivalent as determined by the office of the superintendent of public instruction; have completed the basic professional curriculum in an approved school of nursing verified by official transcript; and passed the National Council of State Boards of Nursing (NCLEX) PN exam, or a Board approved licensing exam.	
LICENSURE REQUIREMENTS: FOREIGN-TRAINED NURSES	Must pass the Montana licensing examination unless they have written a state board test pool licensing examination in another state of the United States. Candidates for licensure as registered nurses will be required to show evidence of having passed the commission on graduates of foreign nursing schools screening examination prior to writing the Montana licensing examination. Candidates for licensure as practical nurses will be required to show evidence of having successfully completed an English proficiency examination before admission to the Montana licensing examination	
LICENSURE REQUIREMENTS: INTERSTATE TELE-CONSULTATION	None. State does not currently participate in interstate licensure compact developed by National Council of State Boards of Nursing.	
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	PRESCRIPTIVE AUTHORITY NPs and CRNAs can prescribe schedule II-V. No protocol required for prescribing. Schedule II limited to a 72-hour supply. PHYSICIAN SUPERVISION APNs practice in collaboration with a supervising physician.	
RECENT STATE REQUIREMENTS TO IMPROVE WORKING CONDITIONS IN CERTAIN INSTITUTIONS	None.	
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	No.	

Sources: State licensing board, AANA, ACNM, Pearson "Annual Legislative Update", HPTS.

Table IV-d.

DENTISTS		
LICENSURE REQUIREMENTS	Must have graduated from an accredited CODA (Commission on Dental Accreditation) approved dental school and have passed the National Board Part I and Part II and the Western Regional Examination (WREB), or Central Regional Dental Testing Service (CRDTS).	
LICENSURE REQUIREMENTS: INTERSTATE TELE-CONSULTATION	Full License.	

Source: State licensing board.

Table IV-e.

PHARMACISTS		
LICENSURE REQUIREMENTS	Must have a Bachelors Degree of Pharmacy from an ACPE (American Council of Pharmaceutical Education) accredited school of pharmacy, a minimum of 1500 internship hours, and must pass the NAPLEX with a 75% or better or pass the Multistate Pharmacy Jurisprudence Exam (MPJE) with a 75% or better.	
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	State permits Collaborative Drug Therapy Management.	
STATE MANDATES INDIVIDUAL PROFESSION PROFILES TO BE PUBLICLY ACCESSIBLE	No.	

Source: State licensing board.

Table IV-f.

DENTAL HYGIENISTS		
LICENSURE REQUIREMENTS	Must have graduated from an accredited CODA (Commission on Dental Accreditation) approved dental hygiene school and passed the National Board Examination and the Western Regional Examination Board (WREB).	
RECENT STATE MANDATED EXPANSIONS IN SCOPE OF PRACTICE	PRESCRIPTIVE AUTHORITY None DENTIST SUPERVISION A licensed dental hygienist with a limited access permit may provide dental hygiene preventative services without dentist supervision in a public health setting.	

Source: State licensing board, ADHA.

Glossary of Acronyms

CNM: Certified nurse midwife.

CRNA: Certified registered nurse anesthetist.

DEA: Drug Enforcement Agency.

HPSA: Health Professional Shortage Area

NCLEX: National Council Licensure Examination, administered by the National Council of State Boards of Nursing.

NP: Nurse practitioner.

RDHAP: Registered dental hygienist in alternative practice.

V. IMPROVING THE PRACTICE ENVIRONMENT

States have the challenge of not only helping to create an adequate supply of health professionals in the state, but also ensuring that those health professionals are distributed evenly throughout the state. Various programs and incentives are used by states to encourage providers to practice in rural and other underserved areas. The tables in this section describe Montana's programs as well as the perceived effectiveness of these programs.

RECRUITMENT/ RETENTION INITIATIVES

Table V-a.

			Health Professions Affected						
INITIATIVE		Perceived or Known Impact (1= high, 5= low)	Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants	
FOCUSED ADMISSIONS / RECRUITMENT OF STUDENTS FROM RURAL OR UNDERSERVED AREAS	Yes	2	X	X	X	X			
SUPPORT FOR HEALTH PROFESSIONS EDUCATION (stipends, preceptorships) IN UNDERSERVED AREAS	Yes	2	X	X	X	X	X	X	
RECRUITMENT / PLACEMENT PROGRAMS FOR HEALTH PROFESSIONALS	Yes	2	X	X	X	X	X	X	
PRACTICE DEVELOPMENT SUBSIDIES (i.e., start-up grants)	No								
MALPRACTICE PREMIUM SUBSIDIES	No								
TAX CREDITS FOR RURAL / UNDERSERVED AREA PRACTICE	Yes	3	X						
PROVIDING SUBSTITUTE PHYSICIANS (locum tenens support)	No								
MALPRACTICE IMMUNITY FOR PROVIDING VOLUNTARY OR FREE CARE	Yes	N/A	X	X	X	X	X	X	
PAYMENT BONUSES / OTHER INCENTIVES BY MEDICAID OR OTHER INSURANCE CARRIERS	No								
MEDICAID REIMBURSEMENT OF TELEMEDICINE	Yes	3	X						

Source: State health officials.

N/A = Data was not available.

Montana uses malpractice immunity, placement programs and support for health professions education in underserved areas to recruit the major health professions.

LOAN REPAYMENT/ SCHOLARSHIP PROGRAMS *

Table V-b.

Table v-b.	Number Number of Average			Eligible Health Professions						
Program Type		Average Retention Rate	Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants		
LOAN REPAYMENT	2	N/A	N/A	X	X					
SCHOLARSHIP	0	0	N/A*							

^{*} Includes only state-funded programs which require a service obligation in an underserved area. (NHSC state loan repayment programs are included since the state provides funding.)

N/A Data was not available

N/A* Data was not applicable

Source: State health officials.

WORKFORCE PLANNING ACTIVITIES*

Table V-c.

		Health Professions Affected							
ACTIVITY		Physicians	Nurses	Pharmacists	Dentists	Dental Hygienists	Physician Assistants		
COLLECTION / ANALYSIS OF PROFESSIONS SUPPLY DATA:									
FROM <u>PRIMARY</u> SOURCES (e.g., licensure renewal process; other survey research)	Yes	X	X	X	X	X	X		
FROM <u>SECONDARY</u> SOURCES (e.g., state-based professional trade associations)	Yes	X	X	X	X	X	X		
PRODUCTION OF RECENT STUDIES OR REPORTS THAT DOCUMENT / EVALUATE THE SUPPLY, DISTRIBUTION, EDUCATION OR REGULATION OF HEALTH PROFESSIONS	Yes	X	X	X	X	X	X		
RECENT REGULATORY ACTIONS INTENDED TO REQUIRE OR ENCOURAGE COORDINATION OF POLICIES AND DATA COLLECTION AMONG HEALTH PROFESSIONS GROUPS OR LICENSING BOARDS	No								

^{*} One state health official supplied these responses. Therefore, data may be limited and may not accurately reflect all current workforce-planning activities in the state.

Montana collects supply data and produces studies and evaluations for all the major health professions.

VI. EXEMPLARY WORKFORCE LEGISLATION, PROGRAMS AND STUDIES

The following abstracts describe several of Montana's recent endeavors to understand and describe the status of the state's current health care workforce.

Legislation and Programs

H-65 (2003)

This law makes revisions to the existing dentistry and dental hygiene laws. The act waives licensure rules to allow retired or non-practicing dentists and dental hygienists to apply for a license to practice dentistry or dental hygiene for indigent or uninsured patients in underserved or critical need areas. The law also exempts dental students, dental hygiene students, and dental residents who practice without pay under supervision from certain licensure requirements.

H-494 (2003)

This law revises the laws governing licensure of physicians and provides for temporary licensure of people in an approved residency program.

S-363 (2003)

This law places a limitation on awards for punitive damages of the lesser of either \$10 million or three percent of a defendant's net worth.

S-290 (2001)

This law allows advance practice nurses to provide medical certification regarding cause of death on a death certificate.

H-399 (2000)

This law creates a telemedicine certificate for physicians practicing telemedicine in the state. It prohibits the practice of telemedicine in the state with such a certificate and defines and provides the requirements for obtaining a telemedicine certificate.

Income Tax Credit, 1991

Physicians serving in rural areas are eligible for a tax credit each year for up to four years that they practice in a qualifying area. The physician must practice in the area for at least nine months during the year for which they are claiming a credit.

WWAMI Medical Education Program

Montana State University and University of Washington

This program is a cooperative between the University of Washington and the states of Wyoming, Alaska, Montana, and Idaho. The program is designed to make medical education accessible to students in the region by sharing existing facilities and personal in the universities. Each year 20 Montana residents are admitted to the University of Washington School of Medicine as a part of the program. Students in the program are encouraged to choose careers in primary care practice and to locate their practices in non-metropolitan areas.

Studies

Competing for Quality Care

Blue Ribbon Task Force on Health Care Workforce Shortage's, September 2002

The Governor convened a task force in October of 2001 to assess the shortage of health care workers in the state and to develop recommendations to address the issues related to workforce. The Task Force identified five major issue areas where improvements could be made to help Montana's workforce: 1) the state's health care climate; 2) educational opportunities; 3) the health care work environment; 4) reimbursement and compensation; and 5) health care workforce data collection and analysis. The report outlines the Task Force's findings in each of these areas and offers fourteen recommendations for improvements.

Comparison of Montana Physician Fees with Other States

Consultec, March 2001

This report provides an analysis of Montana's Medicaid fees in comparison to other states in a 2000 study by the Urban Institute. The study found that Montana's fees tended to be higher than the national average and had increased along with other states since 1993. The report found that while Montana was one of the higher paying states, which was true to a lesser extent than during the period on prior to 1993.

Rural North Central Montana Partnership: Final Report

Montana State University, March 2002

This is a collaborative project of nursing education programs in the state to address the short and long term nursing needs of rural Montana. Three nursing programs in the state came together to assess the health care environment in six rural counties in the state and to examine the interest of nurses to practice in those areas, the opportunities and resources available to nursing students, and the recruitment and retention initiatives efforts being made. The programs concluded that a shortage of registered nurses existed in North Central Montana and that the key factors in recruiting and retaining nurses in that area were adequate compensation and satisfying working conditions. Furthermore, the report found that there was interest from residents in the area to enroll in a nursing education program and that general education programs could be offered in the area via distance education.

Montana Dental Work Force Analysis

WWAMI Center for Health Workforce Studies, May 2001

This report details the results of a survey of dentists in the state on various topics related to access and the practice of dentistry in Montana. The survey included seven sections on demographics, dental education, practice characteristics, staff and recruitment, patient characteristics, and job satisfaction and was mailed to all licensed dentists in the state of which nearly ninety percent responded.

VII. POLICY ANALYSIS

Statewide Organizations with Significant Involvement in Health Workforce Development/Analysis

- Montana Hospital Association
- Montana Area Health Education Center
- Montana Department of Public Health and Human Services
 - Primary Care Office
- Montana Family Practice Residency
- Montana State University

Evidence of Collaboration: Minimal (largely associated with profession recruitment and retention)

Montana is very rural, largely frontier, state with a small minority population. The state's proportion of residents without health insurance is above the national average. This is partly attributable to Montana's predominant number of small business who say they cannot afford to offer such coverage to their employees. Of equal concern is the persistent lack of geographical access to health care professionals. The proportion of the state's population residing in primary care health professional shortage areas (HPSAs) exceed the national average; the percentage living in dental HPSAs is more than double the national proportion. Montana's overall per capita supply of physicians and nurses is also below national ratios. The state's number of pharmacists and dentists per capita mirrors or exceeds nationwide figures.

Efforts by the state to address health workforce shortages have been piecemeal. Montana enjoys having a ratio of National Health Service Corps (NHSC) professionals per HPSA population that is nearly four times the national ratio. State officials openly state that Montana relies heavily on the NHSC program to address its physician shortages. Although historically the state's Medicaid program is viewed as a better-than-average payer, provider reimbursement rates, particularly for physicians, were reduced for a couple of years to address state budget shortfalls. Less than a fifth of all participating physicians in Medicaid receive annual payments greater than \$10,000, suggesting that Medicaid patients do not represent a significant proportion of practice income for these physicians. On the other hand, Medicaid payment rates for dentists in recent years have risen, and Medicaid payments to pharmacists remain attractive. In general, those providers that do the most to serve Medicaid recipients reportedly have no additional capacity to serve more Medicaid patients.

State officials rate many of the state programs intended to improve provider recruitment and retention in Montana is being particularly effective. The Montana Rural Physician Incentive Program, a loan repayment initiative created in 1991 to encourage primary care physicians to practice in rural medically underserved areas of the state, and the Montana Family Practice Residency, established in the late 1990s to accomplish a similar objective, are two programs viewed as being successful. Seen by state officials as somewhat effective is Montana's tax credit for health professionals practicing in rural areas of the state. Begun in 1991, the \$5,000 state tax credit, originally only for physicians, is available to all health professionals practicing in the state's designated shortage areas.

With Montana lacking its own medical or dental school, the state has had a longstanding arrangement through the Western Interstate Commission for Higher Education (WICHE) and the Washington, Wyoming, Alaska, Montana and Idaho (WWAMI) Regional Medical Education Program to enroll qualified students in out-of-state medical and dental schools as well as other health professions training

programs in the region. Although there is no obligation for these students to return to practice in Montana, some data indicates that more than half of medical students return. In general, the WICHE arrangements are viewed as benefiting more the student than improving the state's health care workforce. Montana's AHEC and other state programs have had a longstanding involvement in encouraging the state's youth to enter health care careers.

In general, a comprehensive database of ongoing information on supply and demand of the state's health workforce is non-existent. The Montana Area Health Education Center (AHEC), Department of Public Health and Human Services' Primary Care Office, Montana Department of Commerce, and others routinely track certain supply trends associated with the state's health care workforce.

Growing concern with mounting shortages of health care workers prompted Montana's governor in 2001 to appoint a Blue Ribbon Task Force on Health Care Workforce Shortages to assess the extent of the problem and develop recommendations and strategies to effectively address the issue. A 2002 report offered various recommendations to improve educational opportunities, the health care work environment, worker reimbursement and compensation, and workforce data collection and analysis. Since the issuance of the report, there appears to be no comprehensive support to address the report's findings and recommendations. Despite some exceptions, there also has been little attention to and collaboration among educational institutions and others for improving the statewide number and capacity of health professions training programs in Montana.

Medicine

Montana's efforts to address the geographic maldistribution of the state's physician workforce by encouraging more graduating physicians to practice in shortage areas have been helpful. However, there has been an increase in the number of physicians who are older and foreign-trained. In relation, a large proportion of active physicians work under *locum tenens* arrangements and do not have a regular practice in one or more locations.

The state relies to a significant extent on physician assistants and nurse practitioners to deliver primary care in many locations unable to attract a physician. A significant proportion of physician assistants practice in rural settings under some level of remote physician supervision. Nurse practitioners are allowed to practice independent of a physician in Montana and about 80 percent of nurse practitioners choose to practice in this way.

Nursing

Although, data on the state's changing demand for and supply of nurses is lacking, there is a growing consensus that a growing nursing shortage in Montana, like elsewhere, is associated with an insufficient capacity of nurse training programs to educate more nurses. Despite increased enrollment in the state's five nurse training programs, increasing numbers of qualified applicants must be turned away. There is greater concern with reports that at least 60 percent of newly trained nurses in Montana leave the state upon graduation due to perceptions that Montana lacks attractive or fulfilling work environments for nurses burdened by loans and other issues. The state's annual number of newly licensed nurses is in decline. While recent data finds that Montana hospitals increasingly have problems filling vacant nurse positions in their institutions, nurse turnover rates are about three times vacancy rates on average.

To counter these trends, many hospitals and nursing schools offer loan repayment opportunities to nursing students. The Montana State University College of Nursing in partnership with other nurse training

programs in the state has agreed to expand nursing education opportunities in rural areas by offering onsite courses in nursing and other health science programs more attractive and available to students in rural settings.

Dentistry

Montana has no dental school and just one dental hygiene training program which recently opened. According to a 2003 survey of the state's dentists, the dentist population in Montana, like elsewhere, is rapidly aging, and there are growing concerns that their supply are not being adequately replenished. The dentist shortage is seen becoming acute in rural areas of eastern Montana. Montana, like a growing number of other states, has recently adopted 'licensing by credential' as one way of more effectively increasing the supply of dentists, particularly in rural areas.

The fledgling supply of dentists appears to operating at capacity and unable to see new patients. Close to 80 percent are enrolled in Medicaid, but less than a third of those receive annual Medicaid payments greater than \$10,000, suggesting that Medicaid patients do not represent a significant proportion of practice income for most dentists.

The new dental hygiene program, which in essence replaced the state's one school that closed in 1989, is challenged to address the current demand by dentists for hygienists. Many hygienists are recruited to dentist practices from outside Montana. In general, hygienists in Montana have relatively liberal supervision arrangements with dentists.

Pharmacists

Like other states, Montana's one school of pharmacy is rapidly moving to graduating all doctoral degree level students of pharmacy. Reports suggest that about 60 percent of the school's graduates remain in the state to practice. A significant number of practicing pharmacists in the state are older and come from outside Montana.

Montana does not yet appear to have a significant problem with overall pharmacist supply. The supply of pharmacists in the state is above the national average. The state's hospitals and drug stores, particularly in rural communities, reportedly are having significant recruiting difficulties.

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